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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,871

08/10/2006

Sumio Saito

06540/LH

4627

1933 7590 12/06/2007  
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC  
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EXAMINER

JOHNSON, RYAN

ART UNIT

PAPER NUMBER

2817

MAIL DATE

DELIVERY MODE

12/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/588,871

Applicant(s)

SAITO ET AL.

Examiner

Ryan J. Johnson

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 and 5-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/10/06, 9/20/06, 10/17/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The abstract of the disclosure is objected to because it is longer than 150 words and 15 lines. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Gercekci et al. (U.S. Patent No. 4,272,736, as cited by applicant and hereinafter Gercekci). Gercekci discloses an oscillator (Fig.1) comprising: an oscillation unit with an amplifier (T2), an LC resonator (C1,C2,L) connected to the amplifier, the LC resonator having an inductance (L) coupled in parallel with a capacitance (C2, through C1), which resonates at a predetermined resonant frequency (inherent behavior of an oscillator), and a feedback circuit (R) which performs positive feedback to the amplifier (T2), the oscillation unit outputting an oscillation signal having a frequency determined by the resonant frequency of the LC resonator (L1,C1, and C2 act as a resonant tank that determines the resonant frequency); a first switch circuit (T1) which is connected to a

power supply unit (Vdd) to an amplifier of the oscillation unit (T2), which turns off an electric power supply to the amplifier during a period where non-oscillating state and turned on after an input (28) to set the oscillation unit in an oscillation state (col.3,6-36); and a second switch circuit (T3) which is connected to the power supply unit (Vdd) to the LC resonator of the oscillation unit, which turns on in a period immediately before the pulse signal is input (when 28 is a digital high, node B is a digital high and switch T3 is on. When the signal switches to low, T3 is turned off, T1 is turned on, and the oscillation unit oscillates; col.3,6-51; Fig.1), so that activation of an oscillation operation of the oscillation unit is accelerated (since energy remains in the resonator, col.4,50-52, T3 must inherently accelerate the start up of the oscillator in comparison to a similar circuit without the priming transistor T3).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gercekci et al. (U.S. Patent No. 4,272,736) in view of Miya et al. (U.S. Patent No. 5,446,419, hereinafter Miya). Gercekci discloses the limitations of claim 1, but does not explicitly disclose the LC resonator being formed by a quarter-lambda transmission path. The examiner asserts that such a resonator is well known in the art. Miya discloses using such a resonator in order to provide a more stable operation (col.1,39-58). Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a well known quarter-lambda transmission line, as disclosed by Miya, in the resonator of the circuit of Gercekci in order to have provided the benefits of a more stable resonator.

***Allowable Subject Matter***

7. Claims 3 and 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Prior art does not show a coil with an intermediate tap and a buffer connected to the intermediate tap in the feedback circuit, as required by claim 3 and in the context of the claims, or a second LC resonator formed by a parallel circuit with the feedback circuit claimed, as required by claim 5 and in the context of the claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Harshbarger (U.S. Patent No. 3,991,388) discloses a similar start-stop oscillation circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J. Johnson whose telephone number is 571-270-1264. The examiner can normally be reached on Monday - Thursday, 9:00 am - 5:00 pm EST.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RJJ/



Robert J. Pascal  
SPE 2817